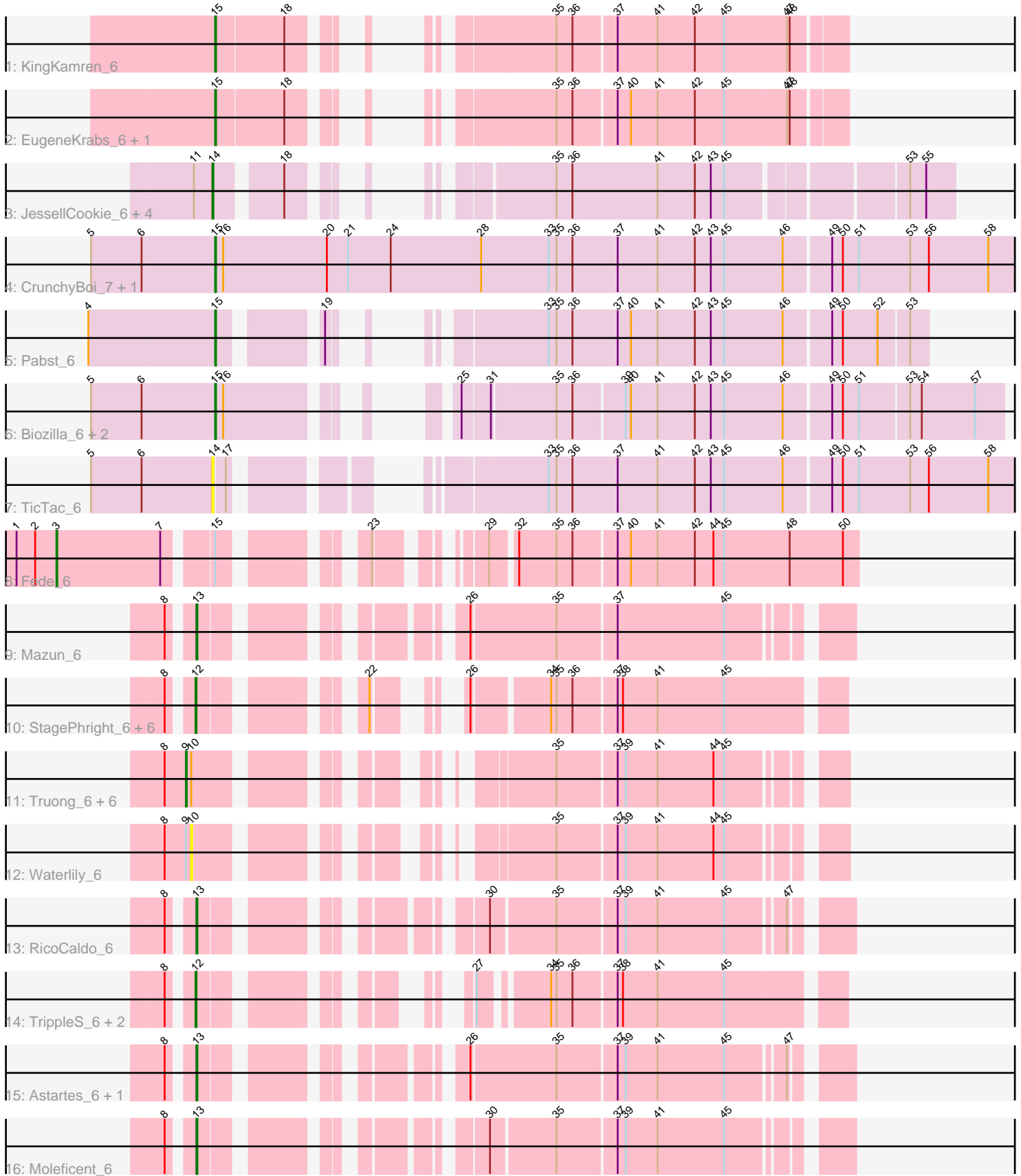


Pham 203108



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

## Pham 203108 Report

This analysis was run 01/18/25 on database version 583.

Pham number 203108 has 39 members, 9 are drafts.

Phages represented in each track:

- Track 1 : KingKamren\_6
- Track 2 : EugeneKrabs\_6, Zhengyi\_6
- Track 3 : JessellCookie\_6, MiamiPanther\_6, YellowPanda\_6, TinyTimothy\_6, Wesak\_6
- Track 4 : CrunchyBoi\_7, PineapplePluto\_7
- Track 5 : Pabst\_6
- Track 6 : Biozilla\_6, Oatly\_6, HitchHiker\_7
- Track 7 : TicTac\_6
- Track 8 : Fede\_6
- Track 9 : Mazun\_6
- Track 10 : StagePhright\_6, Phracted\_6, Pharky\_6, Phedro\_6, Atraxi\_6, PhriedRice\_6, Yafa\_6
- Track 11 : Truong\_6, JordanFarm\_6, Barroma\_6, AloeVera\_6, Akoni\_6, ShyRosie\_6, Ashton\_6
- Track 12 : Waterlily\_6
- Track 13 : RicoCaldo\_6
- Track 14 : TrippleS\_6, ThirteenKH\_6, Morrill\_6
- Track 15 : Astartes\_6, Fullmetal\_6
- Track 16 : Moleficent\_6

### ***Summary of Final Annotations (See graph section above for start numbers):***

The start number called the most often in the published annotations is 12, it was called in 8 of the 30 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- Atraxi\_6, Morrill\_6, Pharky\_6, Phedro\_6, Phracted\_6, PhriedRice\_6, StagePhright\_6, ThirteenKH\_6, TrippleS\_6, Yafa\_6,

Genes that have the "Most Annotated" start but do not call it:

- 

Genes that do not have the "Most Annotated" start:

- Akoni\_6, AloeVera\_6, Ashton\_6, Astartes\_6, Barroma\_6, Biozilla\_6, CrunchyBoi\_7, EugeneKrabs\_6, Fede\_6, Fullmetal\_6, HitchHiker\_7, JessellCookie\_6, JordanFarm\_6, KingKamren\_6, Mazun\_6, MiamiPanther\_6, Moleficent\_6, Oatly\_6, Pabst\_6, PineapplePluto\_7, RicoCaldo\_6, ShyRosie\_6, TicTac\_6, TinyTimothy\_6, Truong\_6, Waterlily\_6, Wesak\_6, YellowPanda\_6, Zhengyi\_6,

### Summary by start number:

#### Start 3:

- Found in 1 of 39 ( 2.6% ) of genes in pham
- Manual Annotations of this start: 1 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Fede\_6 (EK2),

#### Start 9:

- Found in 8 of 39 ( 20.5% ) of genes in pham
- Manual Annotations of this start: 6 of 30
- Called 87.5% of time when present
- Phage (with cluster) where this start called: Akoni\_6 (EK2), AloeVera\_6 (EK2), Ashton\_6 (EK2), Barroma\_6 (EK2), JordanFarm\_6 (EK2), ShyRosie\_6 (EK2), Truong\_6 (EK2),

#### Start 10:

- Found in 8 of 39 ( 20.5% ) of genes in pham
- No Manual Annotations of this start.
- Called 12.5% of time when present
- Phage (with cluster) where this start called: Waterlily\_6 (EK2),

#### Start 12:

- Found in 10 of 39 ( 25.6% ) of genes in pham
- Manual Annotations of this start: 8 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Atraxi\_6 (EK2), Morrill\_6 (EK2), Pharky\_6 (EK2), Phedro\_6 (EK2), Phracted\_6 (EK2), PhriedRice\_6 (EK2), StagePhright\_6 (EK2), ThirteenKH\_6 (EK2), TrippleS\_6 (EK2), Yafa\_6 (EK2),

#### Start 13:

- Found in 5 of 39 ( 12.8% ) of genes in pham
- Manual Annotations of this start: 5 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Astartes\_6 (EK2), Fullmetal\_6 (EK2), Mazun\_6 (EK2), Moleficent\_6 (EK2), RicoCaldo\_6 (EK2),

#### Start 14:

- Found in 6 of 39 ( 15.4% ) of genes in pham
- Manual Annotations of this start: 3 of 30
- Called 100.0% of time when present
- Phage (with cluster) where this start called: JessellCookie\_6 (EK1), MiamiPanther\_6 (EK1), TicTac\_6 (EK1), TinyTimothy\_6 (EK1), Wesak\_6 (EK1), YellowPanda\_6 (EK1),

#### Start 15:

- Found in 10 of 39 ( 25.6% ) of genes in pham

- Manual Annotations of this start: 7 of 30
- Called 90.0% of time when present
- Phage (with cluster) where this start called: Biozilla\_6 (EK1), CrunchyBoi\_7 (EK1), EugeneKrabs\_6 (EK), HitchHiker\_7 (EK1), KingKamren\_6 (EK), Oatly\_6 (EK1), Pabst\_6 (EK1), PineapplePluto\_7 (EK1), Zhengyi\_6 (EK),

### **Summary by clusters:**

There are 3 clusters represented in this pham: EK, EK2, EK1,

Info for manual annotations of cluster EK:

- Start number 15 was manually annotated 3 times for cluster EK.

Info for manual annotations of cluster EK1:

- Start number 14 was manually annotated 3 times for cluster EK1.
- Start number 15 was manually annotated 4 times for cluster EK1.

Info for manual annotations of cluster EK2:

- Start number 3 was manually annotated 1 time for cluster EK2.
- Start number 9 was manually annotated 6 times for cluster EK2.
- Start number 12 was manually annotated 8 times for cluster EK2.
- Start number 13 was manually annotated 5 times for cluster EK2.

### **Gene Information:**

Gene: Akoni\_6 Start: 4942, Stop: 4379, Start Num: 9

Candidate Starts for Akoni\_6:

(8, 4966), (Start: 9 @4942 has 6 MA's), (10, 4936), (35, 4666), (37, 4603), (39, 4594), (41, 4558), (44, 4495), (45, 4483),

Gene: AloeVera\_6 Start: 4942, Stop: 4379, Start Num: 9

Candidate Starts for AloeVera\_6:

(8, 4966), (Start: 9 @4942 has 6 MA's), (10, 4936), (35, 4666), (37, 4603), (39, 4594), (41, 4558), (44, 4495), (45, 4483),

Gene: Ashton\_6 Start: 4946, Stop: 4383, Start Num: 9

Candidate Starts for Ashton\_6:

(8, 4970), (Start: 9 @4946 has 6 MA's), (10, 4940), (35, 4670), (37, 4607), (39, 4598), (41, 4562), (44, 4499), (45, 4487),

Gene: Astartes\_6 Start: 4969, Stop: 4373, Start Num: 13

Candidate Starts for Astartes\_6:

(8, 4990), (Start: 13 @4969 has 5 MA's), (26, 4762), (35, 4669), (37, 4606), (39, 4597), (41, 4561), (45, 4486), (47, 4426),

Gene: Atraxi\_6 Start: 4934, Stop: 4374, Start Num: 12

Candidate Starts for Atraxi\_6:

(8, 4955), (Start: 12 @4934 has 8 MA's), (22, 4805), (26, 4760), (34, 4682), (35, 4676), (36, 4658), (37, 4613), (38, 4607), (41, 4568), (45, 4493),

Gene: Barroma\_6 Start: 4942, Stop: 4379, Start Num: 9

Candidate Starts for Barroma\_6:

(8, 4966), (Start: 9 @4942 has 6 MA's), (10, 4936), (35, 4666), (37, 4603), (39, 4594), (41, 4558), (44, 4495), (45, 4483),

Gene: Biozilla\_6 Start: 5151, Stop: 4411, Start Num: 15

Candidate Starts for Biozilla\_6:

(5, 5289), (6, 5232), (Start: 15 @5151 has 7 MA's), (16, 5142), (25, 4995), (31, 4965), (35, 4896), (36, 4878), (39, 4824), (40, 4818), (41, 4788), (42, 4746), (43, 4728), (45, 4713), (46, 4647), (49, 4599), (50, 4587), (51, 4569), (53, 4515), (54, 4503), (57, 4443),

Gene: CrunchyBoi\_7 Start: 5286, Stop: 4387, Start Num: 15

Candidate Starts for CrunchyBoi\_7:

(5, 5424), (6, 5367), (Start: 15 @5286 has 7 MA's), (16, 5277), (20, 5160), (21, 5136), (24, 5088), (28, 4986), (33, 4911), (35, 4902), (36, 4884), (37, 4833), (41, 4788), (42, 4746), (43, 4728), (45, 4713), (46, 4647), (49, 4599), (50, 4587), (51, 4569), (53, 4512), (56, 4491), (58, 4425),

Gene: EugeneKrabs\_6 Start: 4962, Stop: 4408, Start Num: 15

Candidate Starts for EugeneKrabs\_6:

(Start: 15 @4962 has 7 MA's), (18, 4887), (35, 4719), (36, 4701), (37, 4656), (40, 4641), (41, 4611), (42, 4569), (45, 4536), (47, 4467), (48, 4464),

Gene: Fede\_6 Start: 5153, Stop: 4401, Start Num: 3

Candidate Starts for Fede\_6:

(1, 5198), (2, 5177), (Start: 3 @5153 has 1 MA's), (7, 5036), (Start: 15 @4991 has 7 MA's), (23, 4877), (29, 4799), (32, 4775), (35, 4733), (36, 4715), (37, 4670), (40, 4655), (41, 4625), (42, 4583), (44, 4562), (45, 4550), (48, 4478), (50, 4418),

Gene: Fullmetal\_6 Start: 4966, Stop: 4370, Start Num: 13

Candidate Starts for Fullmetal\_6:

(8, 4987), (Start: 13 @4966 has 5 MA's), (26, 4759), (35, 4666), (37, 4603), (39, 4594), (41, 4558), (45, 4483), (47, 4423),

Gene: HitchHiker\_7 Start: 5151, Stop: 4411, Start Num: 15

Candidate Starts for HitchHiker\_7:

(5, 5289), (6, 5232), (Start: 15 @5151 has 7 MA's), (16, 5142), (25, 4995), (31, 4965), (35, 4896), (36, 4878), (39, 4824), (40, 4818), (41, 4788), (42, 4746), (43, 4728), (45, 4713), (46, 4647), (49, 4599), (50, 4587), (51, 4569), (53, 4515), (54, 4503), (57, 4443),

Gene: JessellCookie\_6 Start: 5051, Stop: 4404, Start Num: 14

Candidate Starts for JessellCookie\_6:

(11, 5072), (Start: 14 @5051 has 3 MA's), (18, 4988), (35, 4826), (36, 4808), (41, 4712), (42, 4670), (43, 4652), (45, 4637), (53, 4454), (55, 4436),

Gene: JordanFarm\_6 Start: 4942, Stop: 4379, Start Num: 9

Candidate Starts for JordanFarm\_6:

(8, 4966), (Start: 9 @4942 has 6 MA's), (10, 4936), (35, 4666), (37, 4603), (39, 4594), (41, 4558), (44, 4495), (45, 4483),

Gene: KingKamren\_6 Start: 4962, Stop: 4408, Start Num: 15

Candidate Starts for KingKamren\_6:

(Start: 15 @4962 has 7 MA's), (18, 4887), (35, 4719), (36, 4701), (37, 4656), (41, 4611), (42, 4569), (45, 4536), (47, 4467), (48, 4464),

Gene: Mazun\_6 Start: 4969, Stop: 4373, Start Num: 13

Candidate Starts for Mazun\_6:

(8, 4990), (Start: 13 @4969 has 5 MA's), (26, 4762), (35, 4669), (37, 4606), (45, 4486),

Gene: MiamiPanther\_6 Start: 5051, Stop: 4404, Start Num: 14

Candidate Starts for MiamiPanther\_6:

(11, 5072), (Start: 14 @5051 has 3 MA's), (18, 4988), (35, 4826), (36, 4808), (41, 4712), (42, 4670), (43, 4652), (45, 4637), (53, 4454), (55, 4436),

Gene: Moleficent\_6 Start: 4963, Stop: 4373, Start Num: 13

Candidate Starts for Moleficent\_6:

(8, 4984), (Start: 13 @4963 has 5 MA's), (30, 4738), (35, 4669), (37, 4606), (39, 4597), (41, 4561), (45, 4486),

Gene: Morrill\_6 Start: 4918, Stop: 4373, Start Num: 12

Candidate Starts for Morrill\_6:

(8, 4939), (Start: 12 @4918 has 8 MA's), (27, 4744), (34, 4681), (35, 4675), (36, 4657), (37, 4612), (38, 4606), (41, 4567), (45, 4492),

Gene: Oatly\_6 Start: 5151, Stop: 4411, Start Num: 15

Candidate Starts for Oatly\_6:

(5, 5289), (6, 5232), (Start: 15 @5151 has 7 MA's), (16, 5142), (25, 4995), (31, 4965), (35, 4896), (36, 4878), (39, 4824), (40, 4818), (41, 4788), (42, 4746), (43, 4728), (45, 4713), (46, 4647), (49, 4599), (50, 4587), (51, 4569), (53, 4515), (54, 4503), (57, 4443),

Gene: Pabst\_6 Start: 5012, Stop: 4383, Start Num: 15

Candidate Starts for Pabst\_6:

(4, 5153), (Start: 15 @5012 has 7 MA's), (19, 4925), (33, 4799), (35, 4790), (36, 4772), (37, 4721), (40, 4706), (41, 4676), (42, 4634), (43, 4616), (45, 4601), (46, 4535), (49, 4487), (50, 4475), (52, 4436), (53, 4403),

Gene: Pharky\_6 Start: 4930, Stop: 4370, Start Num: 12

Candidate Starts for Pharky\_6:

(8, 4951), (Start: 12 @4930 has 8 MA's), (22, 4801), (26, 4756), (34, 4678), (35, 4672), (36, 4654), (37, 4609), (38, 4603), (41, 4564), (45, 4489),

Gene: Phedro\_6 Start: 4930, Stop: 4370, Start Num: 12

Candidate Starts for Phedro\_6:

(8, 4951), (Start: 12 @4930 has 8 MA's), (22, 4801), (26, 4756), (34, 4678), (35, 4672), (36, 4654), (37, 4609), (38, 4603), (41, 4564), (45, 4489),

Gene: Phracted\_6 Start: 4930, Stop: 4370, Start Num: 12

Candidate Starts for Phracted\_6:

(8, 4951), (Start: 12 @4930 has 8 MA's), (22, 4801), (26, 4756), (34, 4678), (35, 4672), (36, 4654), (37, 4609), (38, 4603), (41, 4564), (45, 4489),

Gene: PhriedRice\_6 Start: 4930, Stop: 4370, Start Num: 12

Candidate Starts for PhriedRice\_6:

(8, 4951), (Start: 12 @4930 has 8 MA's), (22, 4801), (26, 4756), (34, 4678), (35, 4672), (36, 4654), (37, 4609), (38, 4603), (41, 4564), (45, 4489),

Gene: PineapplePluto\_7 Start: 5295, Stop: 4399, Start Num: 15

Candidate Starts for PineapplePluto\_7:

(5, 5433), (6, 5376), (Start: 15 @5295 has 7 MA's), (16, 5286), (20, 5169), (21, 5145), (24, 5097), (28, 4995), (33, 4920), (35, 4911), (36, 4893), (37, 4842), (41, 4797), (42, 4755), (43, 4737), (45, 4722), (46, 4656), (49, 4608), (50, 4596), (51, 4578), (53, 4521), (56, 4500), (58, 4434),

Gene: RicoCaldo\_6 Start: 4960, Stop: 4370, Start Num: 13

Candidate Starts for RicoCaldo\_6:

(8, 4981), (Start: 13 @4960 has 5 MA's), (30, 4735), (35, 4666), (37, 4603), (39, 4594), (41, 4558), (45, 4483), (47, 4423),

Gene: ShyRosie\_6 Start: 4942, Stop: 4379, Start Num: 9

Candidate Starts for ShyRosie\_6:

(8, 4966), (Start: 9 @4942 has 6 MA's), (10, 4936), (35, 4666), (37, 4603), (39, 4594), (41, 4558), (44, 4495), (45, 4483),

Gene: StagePhright\_6 Start: 4930, Stop: 4370, Start Num: 12

Candidate Starts for StagePhright\_6:

(8, 4951), (Start: 12 @4930 has 8 MA's), (22, 4801), (26, 4756), (34, 4678), (35, 4672), (36, 4654), (37, 4609), (38, 4603), (41, 4564), (45, 4489),

Gene: ThirteenKH\_6 Start: 4918, Stop: 4373, Start Num: 12

Candidate Starts for ThirteenKH\_6:

(8, 4939), (Start: 12 @4918 has 8 MA's), (27, 4744), (34, 4681), (35, 4675), (36, 4657), (37, 4612), (38, 4606), (41, 4567), (45, 4492),

Gene: TicTac\_6 Start: 5163, Stop: 4387, Start Num: 14

Candidate Starts for TicTac\_6:

(5, 5298), (6, 5241), (Start: 14 @5163 has 3 MA's), (17, 5151), (33, 4911), (35, 4902), (36, 4884), (37, 4833), (41, 4788), (42, 4746), (43, 4728), (45, 4713), (46, 4647), (49, 4599), (50, 4587), (51, 4569), (53, 4512), (56, 4491), (58, 4425),

Gene: TinyTimothy\_6 Start: 5051, Stop: 4404, Start Num: 14

Candidate Starts for TinyTimothy\_6:

(11, 5072), (Start: 14 @5051 has 3 MA's), (18, 4988), (35, 4826), (36, 4808), (41, 4712), (42, 4670), (43, 4652), (45, 4637), (53, 4454), (55, 4436),

Gene: TrippleS\_6 Start: 4918, Stop: 4373, Start Num: 12

Candidate Starts for TrippleS\_6:

(8, 4939), (Start: 12 @4918 has 8 MA's), (27, 4744), (34, 4681), (35, 4675), (36, 4657), (37, 4612), (38, 4606), (41, 4567), (45, 4492),

Gene: Truong\_6 Start: 4942, Stop: 4379, Start Num: 9

Candidate Starts for Truong\_6:

(8, 4966), (Start: 9 @4942 has 6 MA's), (10, 4936), (35, 4666), (37, 4603), (39, 4594), (41, 4558), (44, 4495), (45, 4483),

Gene: Waterlily\_6 Start: 4936, Stop: 4379, Start Num: 10

Candidate Starts for Waterlily\_6:

(8, 4966), (Start: 9 @4942 has 6 MA's), (10, 4936), (35, 4666), (37, 4603), (39, 4594), (41, 4558), (44, 4495), (45, 4483),

Gene: Wesak\_6 Start: 5051, Stop: 4404, Start Num: 14

Candidate Starts for Wesak\_6:

(11, 5072), (Start: 14 @5051 has 3 MA's), (18, 4988), (35, 4826), (36, 4808), (41, 4712), (42, 4670), (43, 4652), (45, 4637), (53, 4454), (55, 4436),

Gene: Yafa\_6 Start: 4933, Stop: 4373, Start Num: 12

Candidate Starts for Yafa\_6:

(8, 4954), (Start: 12 @4933 has 8 MA's), (22, 4804), (26, 4759), (34, 4681), (35, 4675), (36, 4657), (37, 4612), (38, 4606), (41, 4567), (45, 4492),

Gene: YellowPanda\_6 Start: 5051, Stop: 4404, Start Num: 14

Candidate Starts for YellowPanda\_6:

(11, 5072), (Start: 14 @5051 has 3 MA's), (18, 4988), (35, 4826), (36, 4808), (41, 4712), (42, 4670), (43, 4652), (45, 4637), (53, 4454), (55, 4436),

Gene: Zhengyi\_6 Start: 4962, Stop: 4408, Start Num: 15

Candidate Starts for Zhengyi\_6:

(Start: 15 @4962 has 7 MA's), (18, 4887), (35, 4719), (36, 4701), (37, 4656), (40, 4641), (41, 4611), (42, 4569), (45, 4536), (47, 4467), (48, 4464),